

## A TOXIC COCKTAIL

Unlike seasoned firewood, household garbage contains a wide range of materials and chemicals.

Burning garbage doesn't destroy those chemicals - it just changes their form, causing unpredictable and harmful chemical reactions. The bottom line: Burning garbage hurts the environment, your health and your wood-burning system.

Dioxin is just one of the many pollutants produced by burning garbage. This highly toxic cancer-causing agent doesn't break down. Airborne dioxin settles in soils, water and vegetation, where livestock and fish can eat it. It builds up in the fats in the body of these animals and is concentrated in cow's milk, for example, and even in human mother's milk.

Even burning paper products can be risky because of chemical contamination. Diapers, coated cardboard, box board and magazines typically all contain plastics. The inks on coloured paper may also be a problem. Even clean-looking paper and cardboard can contribute to dioxin formation when burned.

Burning garbage at home or the cottage is the fifth - largest known source of dioxins in Canada. The problem with burning any kind of garbage is that you just never know what pollutants will result.

## DAMAGE TO YOUR STOVE, FIREPLACE OR FURNACE

All modern wood-burning appliances are tested and certified to ensure they will function properly and safely when correctly installed and used. The U.S. Environmental Protection Agency (USEPA) certifies some modern appliances that meet even cleaner burning standards.

This testing does not extend to any fuels other than wood, so none of the manufacturer's warranty or safety features, instructions or clearances are valid if the stove is used as an incinerator. Wood stoves, fireplaces and furnaces are designed and certified to burn untreated, clean, dry, wood, with just enough plain newspaper to get fires started.

Apart from harming the environment and your wood-burning equipment system, garbage is a poor source of fuel because it provides very little heat and the large amount of ash residue clogs up the firebox.



**Burn it Smart!**

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**DON'T BURN  
HOUSEHOLD GARBAGE**

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## DON'T BURN - REDUCE AND RECYCLE

You might think that burning garbage is better than burying it in a landfill site, but it's not - not in your wood-burning stove, furnace or your fireplace, or in a back-yard barrel.

Food packaging is one of the biggest sources of household garbage, so a good way to cut your garbage output is to simply reduce the amount of packaging you buy.

Most paper and plastic can be recycled. Recycling is far kinder to the environment than burning because it doesn't pollute the air and it provides the raw material for many new products.



**What to burn:**

- Seasoned, clean firewood

**Please don't burn:**

- Garbage of any kind
- Treated, painted or coated wood
- Plywood or particle board
- Salt water driftwood
- Railroad ties

[www.ec.gc.ca/cleanair-airpur](http://www.ec.gc.ca/cleanair-airpur)

## TIPS FOR GOOD FUEL

Cut, split and stack firewood in an open area in the early spring to be ready for the next heating season.

Very hard woods like oak may take longer to season, especially in damp maritime climates. Don't store wet wood indoors. Bring seasoned dry wood in as needed.

Cut firewood pieces to a consistent length, about 75 mm (three inches) shorter than the widest part of your firebox.

Split firewood into a variety of sizes, ranging from about 75 mm (three inches) to no more than 150 mm (six inches) across.

Stack the firewood on poles to raise it slightly off the ground. Separate the rows to allow air circulation and drying. Cover the top of the wood pile to protect it from rain and snow.

Clean scrap lumber and packing skids can be cut up and split for kindling if the pieces are unpainted and uncoated.

## TIPS FOR SMOKE-FREE FIRES

A good, hot wood fire doesn't produce much smoke because most of the tarry droplets and gases that make up the smoke are burned in the stove. The easiest way to reduce smoky fires is to use an advanced combustion stove like those certified by the USEPA (United States Environmental Protection Agency).

Whether or not you use an EPA - certified cleaner-burning stove, there are still things you can do to reduce the smoke from your fires:

- Burn only seasoned wood. Wet wood makes cool, smoky fires.
- Burn the wood in cycles. A cycle starts with loading some wood onto a bed of charcoal and is completed when about the same size charcoal bed remains. Don't expect a perfectly even steady heat output. In most appliances, the wood burns best in cycles.
- Make sure that each load of wood flames brightly until it is reduced to a coal bed.
- Never let a fire smolder.
- In mild weather, split your wood smaller and build smaller fires using at least three - and preferably five or six - small pieces. One or two large pieces of wood in the firebox will smolder.
- Check your chimney. If there is smoke other than on start-up, something is wrong and you should consult with someone who is certified by Association des professionnels du chauffage, (APC), of Quebec, or Wood Energy Technical Training, (WETT) for the rest of Canada.